

Work Order ID 132518

132518

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May-07-15 2:50:10 PM

Item ID: D3136-043 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Window Assembly
 Start Date: 5/07/15 Start Qty: 6.00 *6* Cust Item ID:
 Required Date: 5/07/15 Req'd Qty: 6.00 *6* Customer:
 Reference:

Approvals: Process Plan: W Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3136	F								

100 FLOW WATER JET 0.00
 100 6 0 Jm15-5-20
 Waterjet Memo 0.01

FLOW CNC Waterjet 1-Cut as per Dwg
 Plexiglas G.125 Dwg Rev: F
 Prog Rev: F

110 QC2- Inspect parts off machine FAI/FAIB 0.00
 110 6 0 Jm15-5-20
 QC Memo 0.00
 Quality Control

120 QC8- Inspect parts - second check 0.00
 120 6 0 Jm15-5-20
 QC Memo 0.00
 Quality Control

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																								
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Root Cause		FAULT CATEGORY																																																													
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :	
Misidentified ☐	Past Due ☐																																																														

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Thermoform Thermoforming Machine	THERMOFORMING MACHINE Memo 1-Deburr if necessary 2-Thermoform as per Dwg D3136 and Work Instruction WI002 Dwg Rev. <u>F</u> WI Rev. <u>E</u> 3- Engrave Part # and Batch # , and affix labels (D3136-3)	0.00 0.06				<u>XL</u>			DAS 07 9-89 15/05/21
140 *140* Thermoform Thermoforming Machine	HAND FINISHING THERMOFORMING Memo Water sand and buff to remove scratches as required	0.00 0.05				<u>XL</u>			DAS 07 9-89 15/05/21

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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170 *170* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo Inspect edge and window deformation, wrap in plastic	0.00 0.00				(5)			DAS 38 9-89 MAY 25 2015 P.T.O.
180 *180* Packaging Packaging	Identify as per dwg & Stock Location: <u>stubs</u> Memo	0.00 0.00				S			DAS 27 9-89 MAY 26 2015
190 *190* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.01				MLJ			MAY 26 2015 MLJ MAY 26 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Date : MAY 25 2015		Step #: 170		QTY Effective : 1			MRB (QSI042) Approval																																																														
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<i>found / piece with scratch</i> <i>RC. Handling</i>				<i>Scrap / destroy</i> <i>no replace</i>																																																																	
Root Cause		FAULT CATEGORY																																																																			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☒	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☒	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☒	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
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Picklist Print

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Parent Item: D3136-043

D3136-043

Parent Item Name: Window Assembly

Start Date: 5/07/15

Required Date: 5/07/15

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:A04.02.04New issueKJ/DS
IPP Rev.B 07.05.29 Thermoform in-house DL
IPP rev C 07.09.28 Rev E dwg EC verified by:DD IPP Rev:D
10.06.24 added note in qc5 seq 170 DD verf:EC IPP Rev E 14/01/20
Replace "Folio" with Work Instruction DL

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3108-9		Manufactured	No			100	Each	311.0000	2	12			DAS 07 9-89

D3108-9

Decal

15/05/21

Location Loc Qty Loc Code

ST017 311

46546 311

MACRLICS.125

Purchased

No

170 sf

134.1670

3.9

23.4

MACRI ICS 125

1/8" Polycast II Sheet

25

Jm15-520

Location Loc Qty Loc Code

MAT019 134.167

m130047 22.667

m131524 111.5

131524

DQA: _____ Date: _____

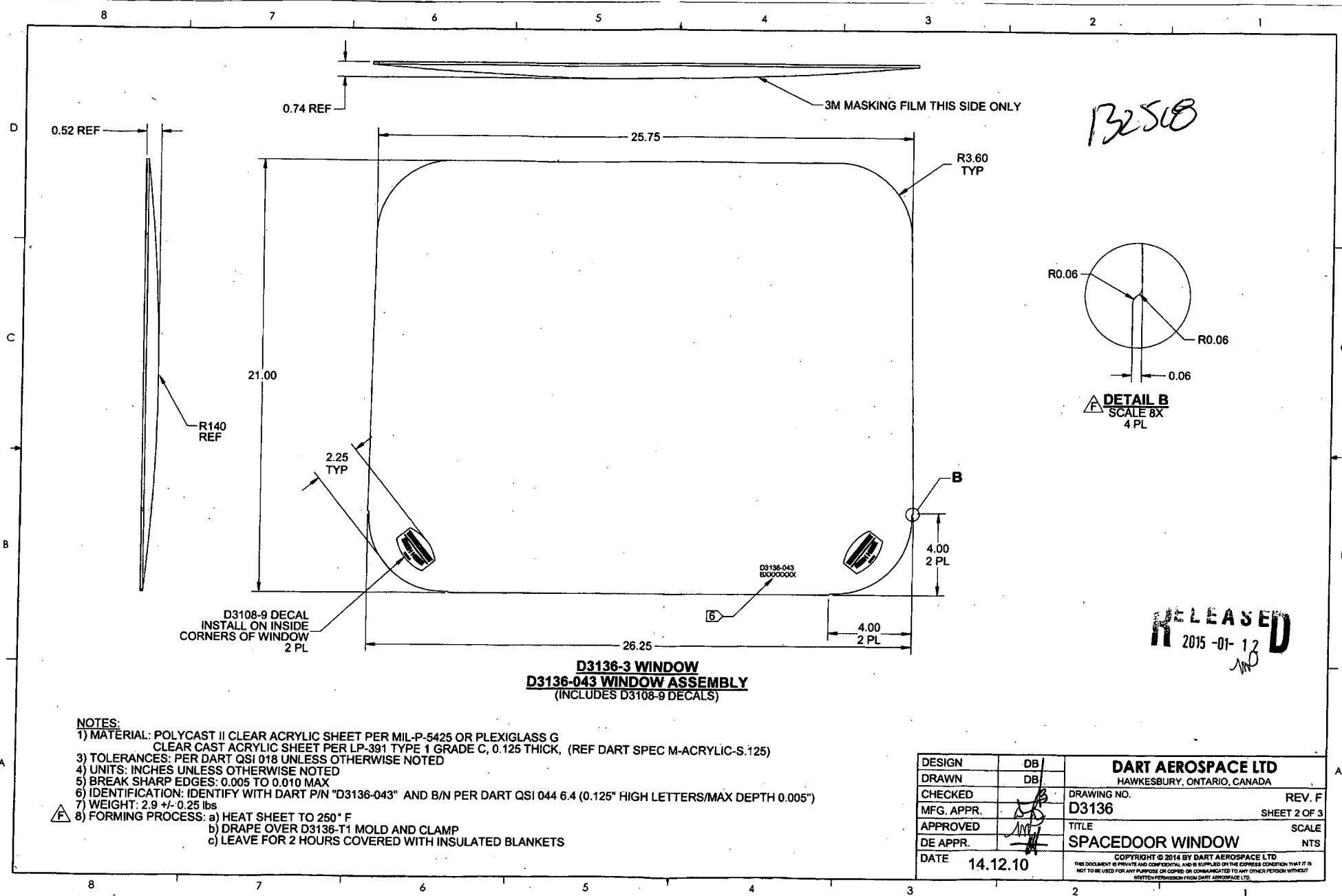


WORK ORDER NON-CONFORMANCE / UPDATE

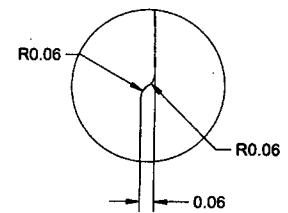
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Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
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Misidentified ☐	Past Due ☐								



132518



RELEASED
2015-01-13
MD

NOTES:

- 1) MATERIAL: POLYCAST II CLEAR ACRYLIC SHEET PER MIL-P-5425 OR PLEXIGLASS G CLEAR CAST ACRYLIC SHEET PER LP-391 TYPE 1 GRADE C, 0.125 THICK, (REF DART SPEC M-ACRYLIC-S.125)
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3136-043" AND B/N PER DART QSI 044 6.4 (0.125" HIGH LETTERS/MAX DEPTH 0.005")
- 7) WEIGHT: 2.9 +/- 0.25 lbs
- 8) FORMING PROCESS: a) HEAT SHEET TO 250° F
b) DRAPE OVER D3136-T1 MOLD AND CLAMP
c) LEAVE FOR 2 HOURS COVERED WITH INSULATED BLANKETS

DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DB		
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D3136	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		SPACEDOOR WINDOW	NTS
DATE	14.12.10	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

